

REMARKS

Summary

Claims 1-24 were pending and all of the claims were rejected in the present Office action. Claims 1, 4, 10, 13 and 19 have been amended. No new matter has been added as a result of this amendment. The Applicants have carefully considered the references and reasons presented by the Examiner, and respectfully traverse the rejections. However, in order to expedite consideration of the application, clarifying amendments have been made.

Rejection of Claims

Claims 1-21 received a rejection under 35 U.S.C. §103(a) as being unpatentable over Negishi et al. (U.S. Patent 5,907,314; "Negishi"), in view of Ha (U.S. Patent 6,333,729; "Ha") or Ino et al. (U.S. Patent 6,424,328; "Ino"). Claim 1 has been amended to clarify the subject matter to which the Applicant is entitled.

Amended Claim 1 recites, *inter alia*, the image signals being applied simultaneously with inverse polarity to a pair of opposing divided source lines; scanning of the first gate driver proceeds downward from the top, and at substantially the same time scanning of the second gate driver proceeds upward from the bottom.

Negishi teaches a set of divided source lines. Ha and Ino do not teach divided source lines, but the Examiner uses each of these references to provide a teaching that "the predetermined number of source lines is less than a number of source lines in the first and [second] group". (Office action, page 3) (N.B., the Applicants have supplied a word in the quotation solely to produce a readable sentence which is plausibly related to the subject, and do not concede that this is correct.) Ha and Ino do not teach that there are divided groups of source lines and thus there are not first and second groups; rather, the teachings of each of the references is directed to specific arrangements of the image data in memory, and to methods of demultiplexing specific data arrangements for a single group of source lines. As such, the Examiner has not made out a *prima facie* case of obviousness and has used hindsight to combine the teachings of Ha or Ino with that of Negishi.

Since Ha and Ino do not teach a second group of source lines, divided from the first group of source lines, neither reference can be used to teach image signals being applied simultaneously with inverse polarity to a pair of opposing divided source lines.

Rather than teaching the image signals being applied simultaneously with inverse polarity to at least a pair of divided source lines, as in the arrangement of Claim 1, Negishi teaches that "...the lowermost line of the upper half 110a of the liquid-crystal display panel 102 and the uppermost line of the liquid crystal display panel 102, which neighbor each other, are loaded with video signals having equal polarities. This condition prevents the occurrence of disclination which would decrease the quality of an indicated picture". (Negishi, col 26, lines 60-66). This teaching is diametrically opposite the arrangement of Claim 1, where the image signals are applied simultaneously with inverse polarity to at least a pair of opposing divided source lines. As such, the teachings of Negishi cannot be combined with either those of Ha or Ino to make out a *prima facie* case of obviousness, and Claim 1 is now allowable.

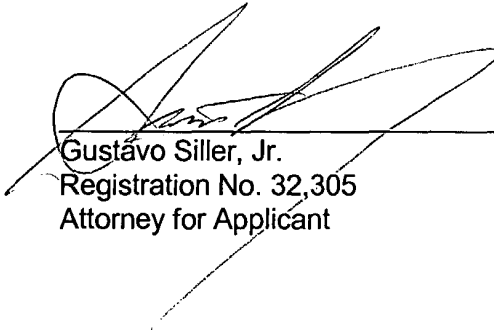
Further, the references cited do not teach the limitation of the arrangement of Claim 1 that scanning of the first gate driver proceeds downward from the top, and at substantially the same time scanning of the second gate driver proceeds upward from the bottom. Support for this amendment may be found at page 11, lines 9-16 of the specification.

Independent Claims 10 and 19 have been amended to recite a similar arrangement, and are allowable for the same reasons. Claims 2-9, 11-18, and 20-24 are dependent on the independent claims and are allowable, without more.

Conclusion

In view of the amendments above, Applicant respectfully submits that all of the pending claims are in condition for allowance and seek an early allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorney or agent.

Respectfully submitted,



Gustavo Siller, Jr.
Registration No. 32,305
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200